



MAP OF PLASMID pHH21 NP UTR luciferase

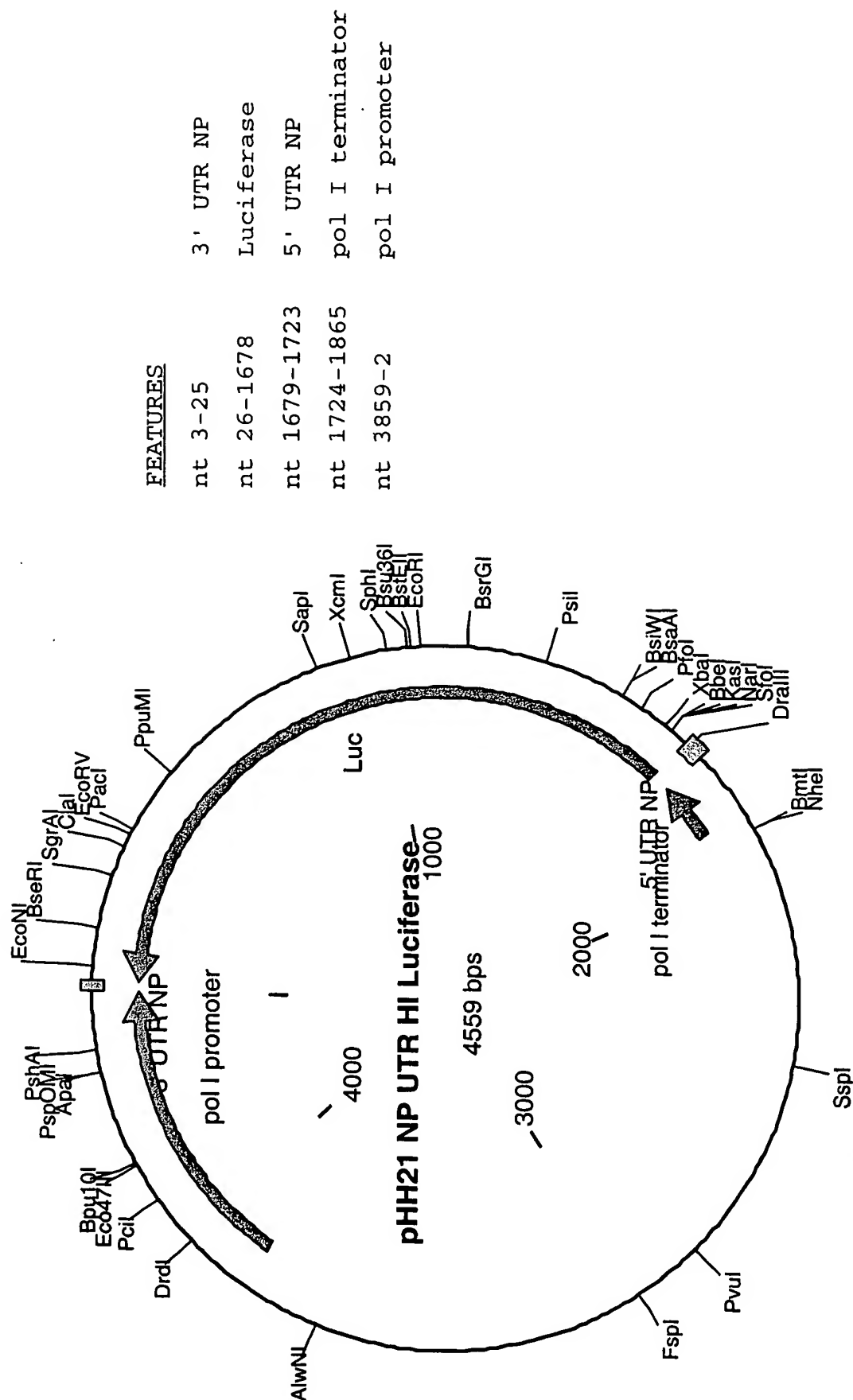


FIG. 1

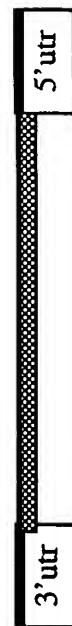
TRANSCRIPTION, REPLICATION AND TRANSLATION OF A SEGMENTED NEGATIVE STRAND VIRUS ARTIFICIAL SEGMENT



pHH21 NP UTR HI Luciferase



Transfect cells
with plasmid



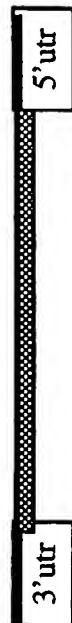
Host cell RNA polymerase I enzyme transcribes a
negative polarity RNA molecule



Infect with virus-
containing sample or
introduce viral
polymerase components



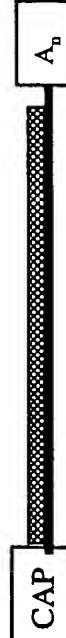
+



Viral polymerase replicates the +
polarity RNA into - polarity RNA

replication

OR



+

Reporter protein

translation

Viral polymerase recognizes the
reporter gene containing RNA,
replicates it into a positive polarity
RNA molecule and transcribes it into
an mRNA

FIG. 2



METHOD FOR DETECTING VIRUSES USING VIRAL POLYMERASE RESPONSIVE REPORTER GENES

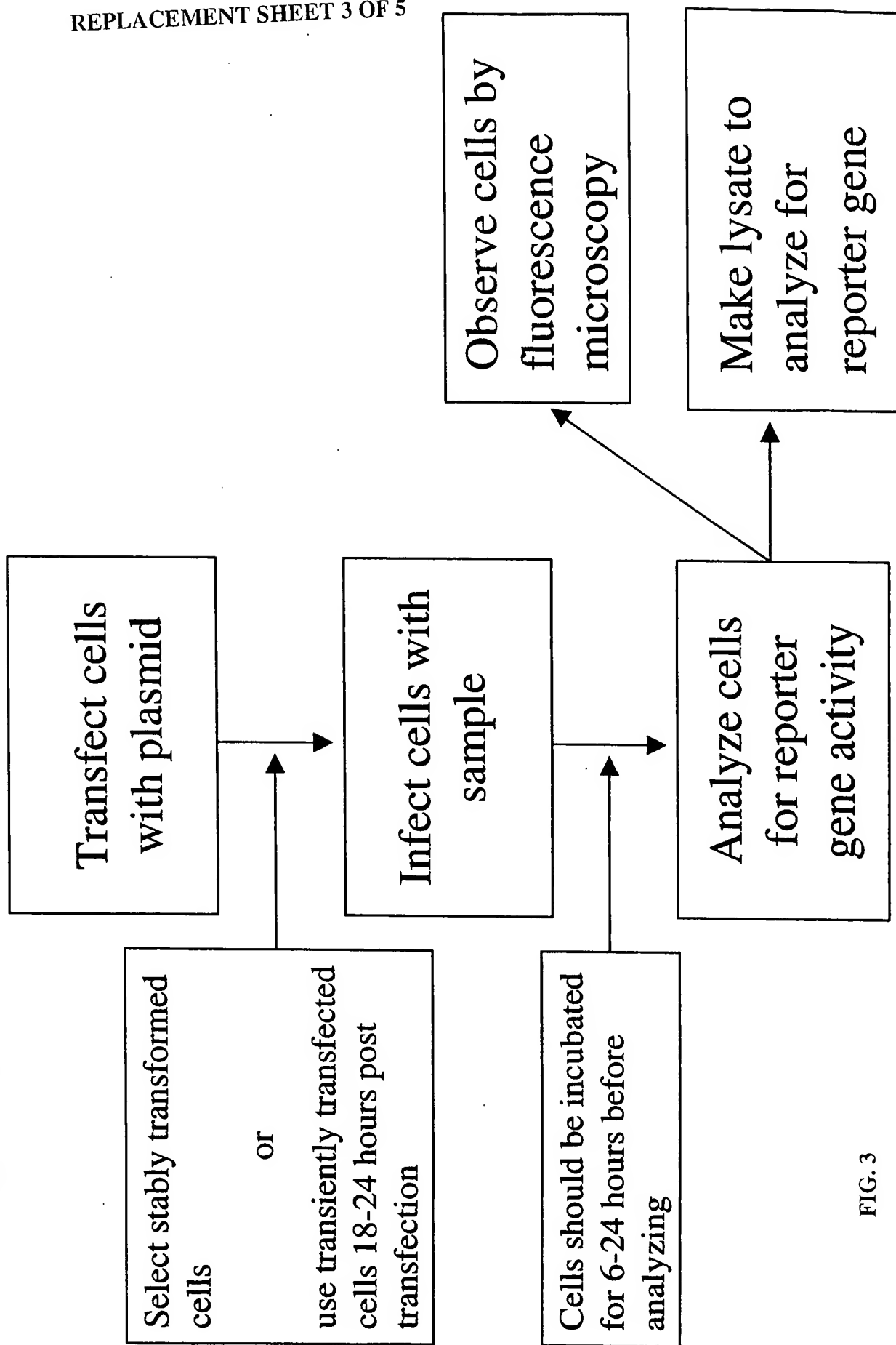


FIG. 3



Luciferase reporter gene assay

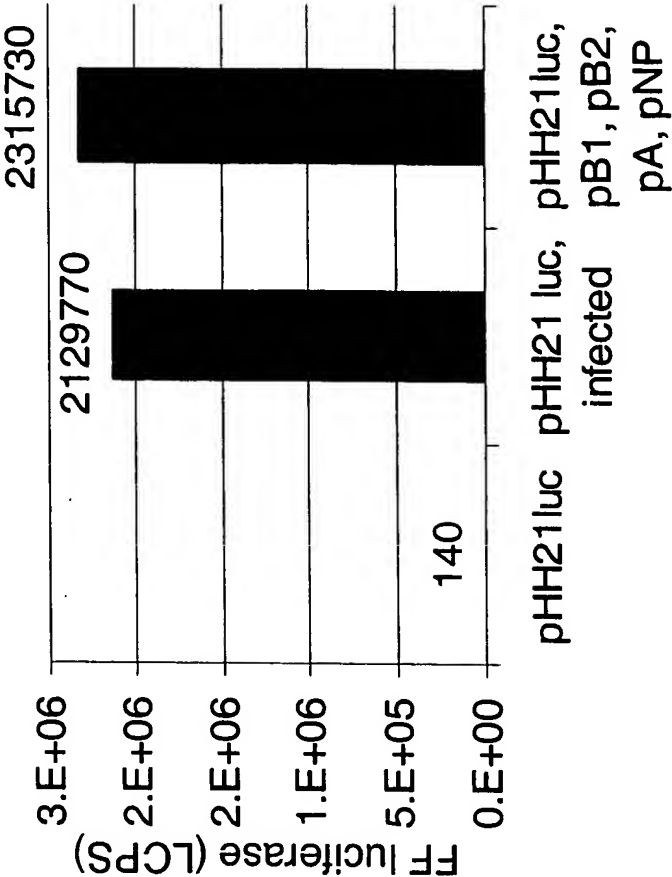


FIG. 4



App. No. 10/700, 239; Filed: 11/3/2003

REPLACEMENT SHEET 5 OF 5

GFP reporter gene assay

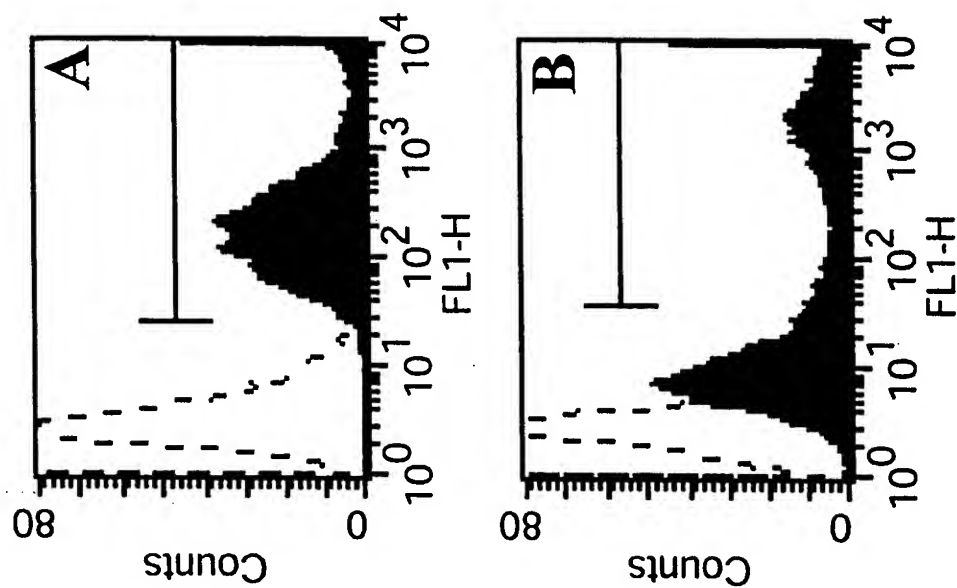


FIG. 5